METHODOLOGICAL APPROACHES TO ENTERPRISE SECURITY MANAGEMENT: TRADITIONAL AND TRANSFORMED TO THE CONDITIONS OF FUNCTIONING

Purpose. To analyse the methodological approaches to enterprise security management with the allocation of traditional ones and those transformed to modern uncertain conditions of functioning.

Methodology. The methodological basis of the study was the scientific works by domestic and foreign scholars to identify the main theoretical provisions on approaches to security management, which were further analysed for their essence and feasibility of use in specific conditions of enterprise functioning. By combining the methods of analysis, synthesis, morphological analysis, and generalisations, the authors have managed to identify traditional approaches to enterprise management and those transformed to modern conditions which are inter-integrated and complementary.

Findings. A map of the integration of traditional methodological approaches of enterprise security management and those transformed to modern conditions was formed and proposed, which can be used by enterprises to find effective approaches to security management depending on the object to which the management vector is immediately directed.

Originality. The authors analyse a number of approaches to enterprise security management, starting with traditional approaches and moving towards their change depending on the conditions and environment of enterprise functioning. The authors trace the layering of several approaches on the traditional ones simultaneously, which is explained by the complication of the conditions of functioning of enterprises. The importance of finding approaches to management depending on the conditions of functioning of the enterprise and the security object to which security management is focused is emphasised.

Practical value. The analysis and the results obtained are of practical value in terms of the feasibility of application at enterprises regardless of their industry, in addition to the effectiveness of the proposed map of approaches, which is variably integrated, taking into account the conditions and the object of management. This will allow one to broadly cover security issues and methodically solve them using a specifically selected approach.

Keywords: enterprise security, management, methodological approaches, conditions of uncertainty

Introduction. For a long time, management has been a subject of particular interest among researchers due to socioeconomic progress, changes in technological paradigms, and digitalization, all of which require a constant revision of management approaches.

The dynamic nature and transition from Industry 4.0 to 5.0, considering the character and speed of technological changes and the reduced duration of transitions from one technological period to another, indicate that today’s economy is transforming, characterized by inversion.

Currently, we are talking about global transitional processes rather than static conditions, where each individual factor of production ensured (covered) what it was spent on, i.e., what the production was directed towards.

The current environmental uncertainty compels enterprises to pay closer attention to security issues, specifically the search for new or the use of traditional management approaches, adapting them to the current unpredictable operating conditions of economic entities.

The security of enterprises, more precisely its provision, has become particularly significant. Thus, it is crucial to seek management approaches through the lens of risks, threats, and uncertainties in their operating environment. This dynamic functioning, the differences in development rates, and the speed at which enterprises adapt to uncertain conditions direct research towards considering management as a dynamic process, requiring the transformation of traditional management approaches to fit current uncertain conditions.

Enterprises must adapt to complex changes, wartime conditions, and transformational Euro-integration processes that are actively occurring across all fields of activity. Therefore, it is worth considering issues related to approaches to enterprise security management with potential transformations to meet threatening and uncertain operating conditions.

Literature review. Researchers propose a wide range of scientific approaches to evaluating and managing enterprise security, based on general scientific approaches to enterprise management, such as the functional approach, the process approach, the systems approach, and the situational approach. This issue has been addressed in numerous scientific works by domestic and foreign scholars. Specifically, the functional approach has been explored in the works of A. Fayol, N. S. Rinkerich, and G. S. Chernovianova [1, 2].

Areleva O.V. [3] investigates the competency-functional approach to management, considering enterprises’ pursuit of innovation to maintain competitiveness. M. Porter, O.V. Vinogradova, and O. M. Zagorodnya [4, 5] consider the process approach the most effective, given the integral nature of business processes as components of enterprise functioning. Subsequently, the approach has evolved into the process-functional approach (studied by O. S. Khrynyuk and O.S. Solosich [6]), which is based on the management of existing resources and processes within an enterprise.

Scientists I. I. Stets and V.S. Blikhar [7, 8] find the systems approach appropriate for management, as enterprises are complex systems, and individually selected approaches to sys-
Therefore, the functional approach consists in the inter-
connection of all management functions, such as: planning, 
organization, motivation and control, through which needs 
are met. The approach is focused on the result — the satisfac-
tion of needs, as well as on the objects of management, con-
tributes to the establishment of the organizational structure of 
the enterprise. It is believed that the functional approach is not 
aimed at obtaining the planned target results of activities in 
general by the entire organization, since the subsystems within 
the organization are oriented to their own results.

Chernoivanova G. S., on the basis of previously conducted 
surveys, analyzed the percentage of mentions among scientists 
of other functions, in addition to the classical functions of 
management according to A. Fayol, so about 38.5 % of scien-
tists use the function of coordination and 27 % — the function of 
regulation [2].

Over time, the functional approach has lost popularity due 
to a decrease in the efficiency of use, so usually, when choos-
ing it, scientists combine the approach with others, most often 
with the structural approach. However, according to Hry-
niuk O.S., Solosich O.S., this approach can be successfully 
used as a component of a systemic approach in the formation of 
elements of the economic security system [6].

In view of the innovativeness of enterprises by O. V. Arefev-
ya it is proposed to use a competence-functional approach to 
management, which fixes purposefulness in maintaining priori-
ties and the universality of using knowledge through the com-
petencies of management functions, whose orientation requires 
the use of acceptable analysis tools, for example, expert meth-
ods, for qualitative evaluation of the research object [2].

The functional efficiency of enterprises is evaluated, as a 
rule, precisely according to the functional approach, the ulti-
mate goal of which is to reduce the costs of the enterprise, in 
the case of being aimed at increasing competitiveness, stimu-
lating sales, and finding optimal ways to reduce operational 
and financial cycles.

After the loss of management efficiency under the func-
tional approach, it was replaced by the process approach, 
which became widespread in the early 80s of the 20th century.
The essence of the approach is to consider each management 
function as a process that is the sum total of all functions. The 
approach underwent changes as a result of industrialization, 

- on the pre-industrial level — a description of production 
  processes for the production of high-quality products;
- on the industrial level — management of the enterprise, 
  organization for the efficiency of the management system;
- on the post-industrial level — a network that includes 
  business processes related to the goals and mission of the 
  enterprise, organization.

In the current conditions, management of the organiza-
tion under this approach is carried out through a network of 
business processes related to the goals and mission of a func-
tioning business entity.

The process is a combination of related, repetitive actions 
with respect to the company’s input resources with the aim of 
transforming them at the output into a product or service ac-
cording to defined rules [18].

For enterprises, the business process is an integral compo-
nent of its functioning, therefore there are quite a lot of inter-
pretations of the concept, among them the definition given by 
O. V. Vynohradova attracts attention; the scientist considers 
the business process as the repetition of tasks at the enterprise, 
or actions, in relation to the resources necessary for the pro-
duction, which are carried out with the aim of obtaining a nec-
essary and valuable result for the consumer [4].

The activity of the organization in the process approach is 
perceived as a set (network) of business processes that are tan-
gential (related) to the goals and mission of the enterprise.

At one time, M. Porter considered management as a chain of 
business processes, which included:
- basic business processes (operational management: identification of consumer needs; product design project development; production of goods (services); sale of goods (services), delivery, maintenance, warranty service);
- support business processes (resource management: human resources management; financial resources management; material resources management);
- business management processes (strategic management: management of information resources).

It is worth noting that the process approach focuses on quality, displacing the enterprise’s concentration exclusively on the results of activity — profits. Improving the quality of products depends on the consumer’s vision of the product or service, which prompts the enterprise to take care of the quality characteristics of services and to improve the management organization for quality orientation.

In order to develop a mechanism for managing the economic security of the enterprise, a process-functional approach is considered, which takes into account hierarchy and responsibilities, coordination of processes and interactions that occur within functions.

Hryniuk O. S. and Solonynch O. S. [6] believe that the process-functional approach preserves the process orientation of control mechanisms in the organization with a clear division of responsibility, compliance with document management rules, standards, administrative documents, additional responsibility for completed tasks within the scope of job duties, as well as focuses on the importance of mutual communication when performing certain functions in the production process to achieve positive results.

In the conditions of crisis situations, in our opinion, a process-oriented approach that combines anti-crisis management with process management in order to form and maintain a system of goals and achievement criteria in a viable state is worth paying attention to.

A process-oriented approach in anti-crisis management of an enterprise is acceptable due to: integration of the strategy of anti-crisis management with process management, as well as the formation and maintenance of a unified system of goals, indicators and criteria for their achievement [5].

Stets I.I. sees a tool for increasing the efficiency of the enterprise in the process approach to enterprise management. The scientist believes that the approach is focused on the results of activity (goods, services), which are valuable for the end consumer, therefore it is not necessary to pay attention to the organizational structure and functions performed at the enterprise [7].

The situational approach is methodologically valuable due to its focus on the study of the object as a system and the search for effective tools to eliminate problems separately for each specific element of the system. V. Bilhar considers the approach to be complex, aimed at studying the system at the level of specific characteristics [8].

Kustovskova O. V. [9] considers the approach the best for formulating the essence of research problems and finding options for solving processes and defines it as one of the main directions of the methodology of scientific knowledge and social practice of researching the complexity of objects as systems.

The situational (case) approach is rather a way of thinking similar to the systemic one.

The approach was initiated in the business school (Harvard), which is based on situational problem solving and optimal decision-making, based on the existing factors in the company’s environment.

In contrast to the process and system approach, which are used most often for planning in a conditionally calm functioning environment (defined), the situational approach is used in an unstable environment and difficult to predict situations.

The situational approach follows the concept of process management, generally established for all organizations, but it foresees the dynamism of methods that must be used by managers due to the peculiarities of the enterprise and production processes, the specifics of the enterprise or its industry affiliation [10].

The situational approach is effective, according to A. Polyanskaya [11], in the case of the need for transformations, namely: the level of development of the “unchanged functioning of the enterprise” moves to the level of “ordinary changes” or the level of “moderate transformations” and requires adequate response of the enterprise to changes in the external environment.

Therefore, the multiplicity of approaches allows choosing the most expedient one for use by enterprises, but their effectiveness depends on adaptability to modern operating conditions and uncertainty of the environment.

In response to the problems of limited resources (not only natural, but also production, financial, informational, time resources) O. E. Kuzmin, et al. [13], A. Duginets, et al. [19], A. Sakun, et al. [20], N. M. Zayed, et al. [21] proposed a process-structured approach to management, which combines several approaches: process, system, situational, dynamic and functional approaches, the concept of which consists in the step-by-step structuring of processes for purposeful management of the control system managed under certain conditions, which developed, and aimed at achieving goals.

Based on the results of research on management approaches, we conclude that along with traditional approaches, transformed approaches are beginning to be used, which are gaining popularity due to changes in the functioning of enterprises and increased requirements for goods and services in terms of quality from the environment and the environment.

Approaches to enterprise management were thoroughly studied by E. V. Chernodubova, and A. A. Martynov; the authors reduce the approaches to the following, emphasizing their complementarity [12]:
- system approach (any system is considered as a set of interconnected elements);
- logical approach (use of logic and laws of thinking as a research tool);
- reproductive-evolutionary approach (aimed at constant renewal of product production with the lowest costs in accordance with market needs);
- innovative approach (activation of innovativeness through production of new products, use of innovative technologies and production approaches);
- a comprehensive approach (taking into account technical, economic, social and other aspects of management);
- a global approach (focusing on all possible levels of the object of research, rather than concentrating on the level of its location during the analysis); integration approach (establishing relationships between all constituent elements and management subjects, regardless of their level of presence);
- virtual approach (use of the Internet, electronic communication networks and services to build a virtual organizational structure);
- standardization approach (establishment of norms and rules, regulations in management);
- marketing approach (orientation of the management entity on the client, user);
- exclusive approach (acquisition by the managing party of the right to use innovative developments, the advantage of an innovative product at its own discretion);
- functional approach (functions are considered as rebula in their execution);
- process approach (implies management through generally related functions in the production process);
- situational (variant) approach (the application of various management methods is determined by a specific situation);
- normative approach (normatives are fixed in management);
- structural approach (weight, level of influence of factors, instruments, search for the optimal proportion of the structure of production factors (resources) is noted);
- optimization (quantitative) approach (implies measurement, evaluation using statistical, economic-co-mathematical methods);
- directive (administrative) approach (rules, duties, management aspects are regulated in normative documents);
- behavioral approach (helping staff to realize their own capabilities).

It should be noted that standardization, normative, and directive approaches are echoed in the implementation of management through the regulation of rules, norms, and orders, so they should be combined and considered, in our opinion, as a single normative-directive approach. Summarizing approaches to enterprise management, we can single out the following (Fig. 1).

Of course, the most often used are functional, process, system, situational, and their combination, depending on the specifics of the enterprise, its operating conditions, and management goals.

The latest developments in security issues should be noted, such as the analysis of methodological approaches in the works by O. M. Lyashenko, et al., which testify to their adaptability to changing conditions and modernity, therefore they will serve as a basis for further development and search for methodological approaches to enterprise security management.

Lyashenko O. M., researching the conceptual principles of security management, suggests that the comprehensive use of scientific approaches: system, process, situational, for their systematic and continuous improvement [14] is expedient in the management of economic security and it is emphasized that a separate method can also act as a tool.

The author also assumed that the theory of management should be supplemented by the theory of conflict-controlled processes, which is seen in the study of controlled systems under conditions of uncertainties and conflicts (mathematical theory of optimal processes under given conditions).

However, for further research, the author has chosen a morphological analysis based on the principles of classifications, the main idea of which is to constantly search for the largest number, or even all options for the solution of the set tasks through interconnection and the use of basic elements of the structure of the studied system or essential features such elements [14].

Since the material is systematized, and the studied system can be divided into parts and viewed from different points of view, it can be assumed that the morphological analysis is based on the systemic approach. We also agree with the opinion that economic security is a function of management, if in essence security is considered as ensuring the effectiveness of the enterprise.

Daniilova E. I. resorts to the morphological description of the economic security system of the enterprise, including the following at the appropriate levels [5]:
- elements of the economic security system: resources that provide economic protection of the activities of the structural divisions of the enterprise (structures, personnel, finances, information support (orders, orders, prescriptions, job instructions, reporting forms, forms of analytical reports, software, methods), technical means (control means, etc.));
- target objects of protection: departments and divisions of the enterprise; the enterprise as a complete business entity or market entity;
- the structure of the goals of the economic security system: at the level of structural subdivisions: security of business processes; personnel safety; security of material resources; information security; relationship security; at the enterprise level: security of the integrity of the property complex, image security, market security.

Having processed the additions of scientists on the economic security of the enterprise, Dub B.S. four approaches to management are distinguished, based on the understanding of the essence of security, with the indication that, according to interpretation, they should be reduced to: structural, functional, and operational, whereby the operational is mentioned twice.

We note that the author gave the same name to the two approaches, however, taking into account the set of interrelated measures specified in the work, which should be carried out to protect the interests of business entities from threats in the environment of its functioning [16, 22], by no means we can perceive it as active, because in its essence it corresponds to a protective approach.

Methodological approaches to determining the economic security of the enterprise were considered by O. O. Sosnovskaya, the main ones were highlighted: sustainable approach, harmonization approach, protective, competitive, resource-functional [17].

Summarizing the provisions and approaches to enterprise security management, the scientist proposed an algorithm that, based on the object-subject approach, which involves considering the economic security of the enterprise as a set of elements of the structure that are in relationship and connection, allows identify the purpose of the enterprise’s functioning, subjects and objects in the management system (which, respectively, implement and influence), as well as directly identify the methodological basis for achieving the goal.

Resource-functional, financial, indicator, program-target and approach based on economic risks are distinguished in the monograph by E. I. Daniilov, who believes that the method is chosen at the discretion of the research subject, that is, directly by the researcher [15].

However, without a properly selected approach to enterprise security management, it is unlikely to achieve success in
the formation of enterprise security, that is why we thoroughly researched the work of scientists on the methodology of enterprise security management, analyzed the approaches, singled out the traditional ones, and considered the additions of scientists who tried to adapt the known approaches to the changing conditions of today.

The result of the study of approaches is the transformation of traditional methodological approaches of enterprise management to the uncertainty of the environment of enterprise functioning (Fig. 2), which can be chosen and used by enterprises for security management depending on the security object to which management is directly directed, as well as the operating conditions.

If the object of protection at the enterprise is the functions performed by it, a functional approach to security management (currently — an activity approach) is appropriate for use, when choosing a process as a security object, a process approach is usually used, and in conditions of uncertainty, it is better to use a process-structured and complex approach.

If a specific situation is to be protected, situational, adaptive, indicator approaches are effective. However, in conditions of dynamic environment, it is better to use two approaches combined in the situational-adaptive approach. In the case of the focus on the protection of the enterprise’s own strategy, the strategic approach is effective, whereas during the protection of the target result as a security object these are the programmatic-target one and the resource-functional approach transformed to the modern conditions of the enterprise’s functioning.

Most often, when managing the security of an object, there is a risk that is the basis of understanding a security breach — danger; in this case, it is advisable to traditionally use the protective approach in the security management of an enterprise or, under changing conditions, the risk-oriented approach. It is expedient to transform structural and functional approaches into one and use them to protect the enterprise’s security management object — a financial resource.

Conclusions. Summarizing the results obtained as a result of the study of methodological approaches to the management of enterprise security, we can conclude that security is multifaceted, consists of many elements, components that are interconnected; therefore, to ensure and manage security, it is necessary to think systematically, comprehensively research processes, phenomena, elements as interrelated components of an integral security management system of the enterprise.

It is advisable to study the relationship between the elements using a system analysis, and to carry out management according to a system approach, which is characterized by a focus on the study of the object as a system and the search for effective tools to eliminate problems separately for each specific element of the system, which will be strengthened when it is used in a complex with other approaches, that is, it allows one to generally cover all aspects and features of the enterprise itself, as well as the environment of its functioning.

In addition, the performance indicators of the enterprise, which are objects of protection, should be investigated and evaluated using the resource-functional approach. It is the initial resources that are the reference point for the formation of the security of the enterprise, the correct management of resources ensures the effectiveness of the enterprise. However, without the inclusion of a process approach, it is impossible to achieve full coverage of the definition of security, since the input resource and the result indicate processivity.

Therefore, the combination of traditional methodological approaches of enterprise security management, their transformation and adaptation to modern conditions, will allow clearly forming a vision regarding the use of methods, their acceptable combination depending on the conditions of operation and the purpose of activity, target results of the enterprise and objects of security management.

Further investigations will be based on the results developed in this study and will be aimed at solving the issues of the movement of the enterprise in the planes characterizing the security conditions.

Security management will be carried out through the use of methodological approaches to enterprise security management developed by us, depending on the presence of the research object in a specific state of security.

References.
Методологічні підходи до управління безпекою підприємства: традиційні та трансформовані до умов функціонування

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Мета. Проаналізувати методологічні підходи до управління безпекою підприємства з використанням традиційних і трансформованих до сучасних невизначених умов функціонування.

Методика. Методологічною основою проведенного дослідження слугували наукові дослідження на тему безпеки підприємців, які в підпільних умовах функціонування. Проведено аналіз правових актів, наукових статей, монографій, методичних посібників з галузі безпеки. Як результат, була створена інформаційна платформа з галузевої безпеки, що включає наукові підходи до управління безпекою підприємства.

Результати. Сформована і запропонована мапа інтегрованого підходу до управління безпекою підприємства, що може використовуватися підприємствами для пошуку ефективних підходів до управління безпекою в залежності від об’єкта, на який безпосередньо направлено вектор управління.

Наукова новизна. Авторами запропонована інновація підходів до управління безпекою підприємства, починаючи від традиційних підходів до управління безпекою підприємства, розглядаючи у рамках їх зміни залежно від умов і середовища функціонування підприємства.

Практична значимість. Проведений аналіз та отримані результати набувають практичної значимості і залежно від їх галузевої принадності, окрім того, існують інші невизначені умови функціонування підприємства. Підкреслена важливість пошуку підходів до управління в залежності від умов функціонування підприємства та об’єкта безпеки, на який орієнтоване управління безпекою.

Ключові слова: безпека підприємства, управління, методологічні підходи, умови невизначеності

The manuscript was submitted 07.02.24.